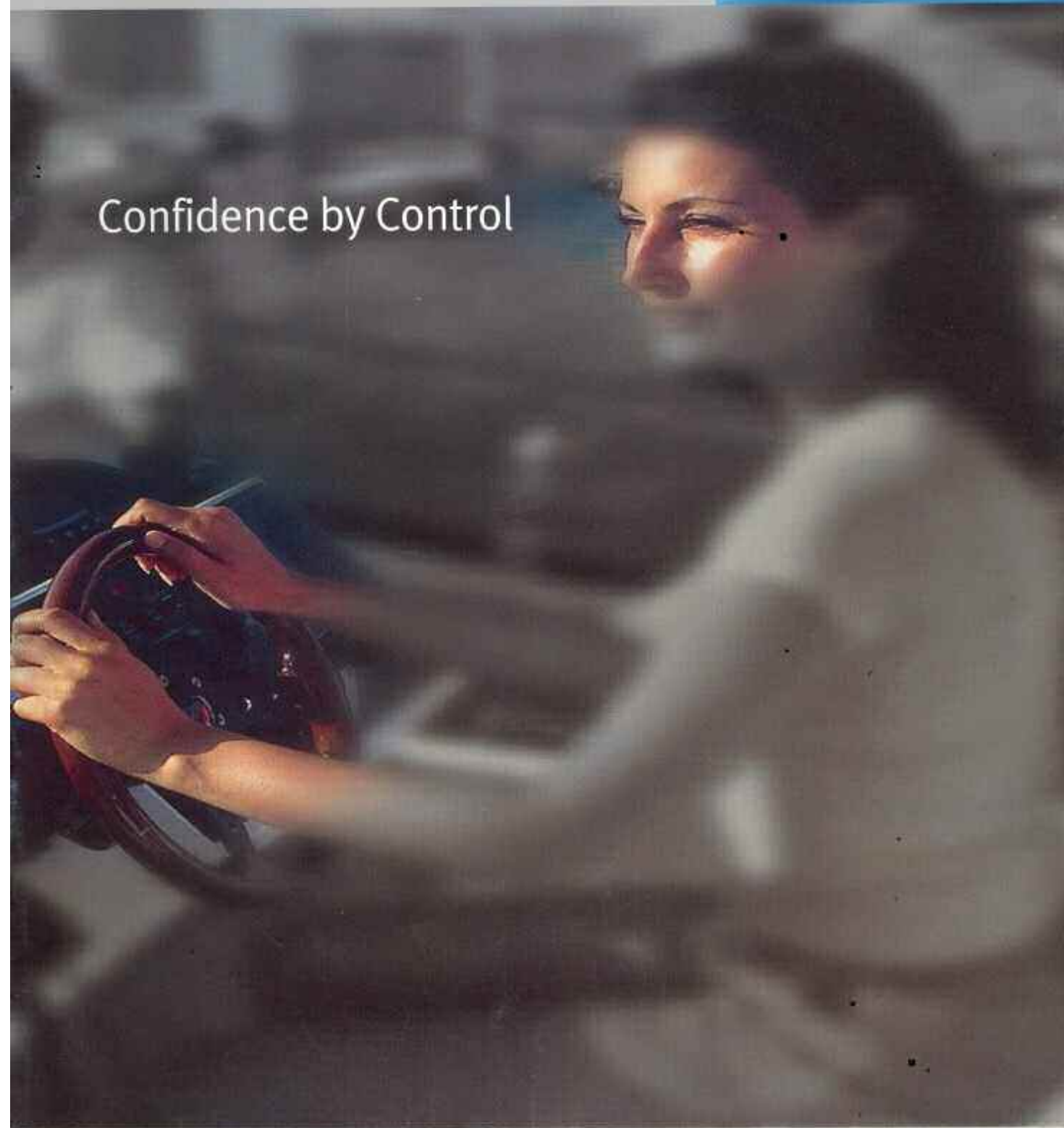


SIDE-POWER

Bow and Stern Thrusters



Confidence by Control



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SIDE-POWER

Safe and easy manoeuvring in close quarters

Most boats just can't be parked like a car.
They benefit from a little extra help around the dock.

Every boat owner will know the problems of manoeuvring in close quarters and the feeling of not being in full control of the boat. Boating is meant to be fun. Why end your day or week on the water with a stressful experience? A Sidepower thruster offers the help you need to be in full control when docking and departing, regardless of wind conditions and currents. Sidepower will give you the confidence to completely enjoy your valuable free time.



Four good reasons why you should choose a Sidepower thruster

Built for outstanding performance, you can rely on your Sidepower thruster year after year. Boatbuilders all over the world are choosing Sidepower for reliability, ease of installation and unrivalled safety features. This commitment to quality has made the new range of Sidepower thrusters from Steptron Motor the market leader.

Performance

The high performance of a Sidepower thruster is a result of our continuous efforts in product development and testing:

- propulsion technology know-how
- new 4 bladed composite propellers
- purpose-built high power electric motors
- improved waterflow from streamlined gearhouse design

Reliability

The quality of a Sidepower is always one step ahead

- in house manufacturing and assembly
- engineering through experience
- use of superior materials
- controlled quality of every supplied part
- 2-year limited warranty

Safety

Sidepower thrusters include several features to ensure the safety of your boat and its passengers. Features that protect against technical and operator errors.

- no overheating of electric motor
- mechanical protection of drive gear
- electronic protection against sudden change of drive direction
- no accidental operation from child safe on/off and automatic deactivation

Installation

Through our extensive experience and close co-operation with major boatbuilders we know how important a correct installation is for the thruster system. Therefore we have made all the preparations to ensure that it is easy to install a Sidepower correctly.

- compact-sized units
- "plug and go" electric wiring
- easily accessible battery cable terminals
- fast and safe propeller mounting with locknut
- professional and solid GRP stern thruster kits
- easy access zinc anodes

Model Range Electric thrusters



Model	SP 35 S	SP 55 S	SP 75 T
Boat size *(ft)	22' - 32'	28' - 40'	35' - 50'
Thrust (kg • lbs)	35 • 77	55 • 121	75 • 165
Tunnel diameter (mm • in)	125 • 4,92"	185 • 7,3"	185 • 7,3"
Propulsion system	Single	Single	Twin
Power (kw • Hp)	2,2 • 3	3,1 • 4	4,4 • 6
Voltage (V)	12	12 • 24	12 • 24
Weight (kg • lbs)	10 • 22	16 • 35	20 • 44

*(This indicates average boat size only. Consult your Sidepower dealer to ensure that you get the correct thruster size for your boat.)

With this new model, more boats can now enjoy the Sidepower qualities and features. Outstanding performance in the smallest tunnel diameter yet.

Derived from our reliable 4 Hp model, developed over 15 years, used by tens of thousands of boaters around the world, this updated version is better than ever.

With this new high power thruster, Sidepower offers more choice so you can have the right performance for your boat.



Total control Bow thruster + Stern thruster

If you want total control, we can help!

Even with twin engines and a bow thruster you may not always have full control of the boat when docking or manoeuvring at slow speeds. Engaging the propellers usually results in sudden movements, making such use of the engines difficult to control. The solution is to install a stern thruster to gain total control of your boat, leaving the main engines to propel the boat forward and backward as they were intended. The Sidepower dual joystick panel provides control of both thrusters with just one hand.

Total control with Sidepower bow and stern thrusters.



Dual thrusters combined with a remote control (or conveniently placed extra panels) is the best combination to make docking easy for a single-handed boater.

A stern thruster consists of a standard Sidepower mounted in a special tunnel fixed onto the transom of the boat, either by bolts or bonding. These tunnels are meticulously designed to enhance the performance of the thruster. Manufactured in fibreglass, they are extremely strong and durable. The complete installation is very easy and meets the same high standards of a Sidepower bow thruster installation.

Sternthruster kits are available to suit boats from 28 ft up to 100 ft.



SIDE-POWER

For you it's **easy to use**
For your family it's **safe**
For your boat it's **well designed**

Our engineers have redesigned the simple switch control to safe and easy to use control panels. Choose between the flush touch panel, our comfortable joystick systems, or use an additional remote control offering full mobility onboard while docking.

The only part of the thruster system that's visible onboard is the control panel.

- compact size
- blends with other controls and instruments
- no visible screws
- optional front installation kit included

A thruster should be easy to operate/use.

- easy control of your boat
- user friendly
- comfortable and safe
- single handed control of both thrusters (dual panel)

Sidepower control panels have features that take safety to a new level.

- waterproof
- no accidental running
- child-safe on/off system
- automatic deactivation
- power/control light

Accept nothing but the best.

- fully electronic
- automotive engineering
- CE-approved
- Multi-voltage (12V & 24V)
- 2-year limited warranty

Additional Sidepower safety features included on the electric thrusters.

- time-lapse protection
- overheat protection

Basic remote control.

- child-safe on/off system
- automatic deactivation
- power/control light
- controls one or two thrusters
- simultaneous and individual control of both thrusters
- waterproof





SP 95 T

42' - 58'

95 • 209

185 • 7,3"

Twin

6 • 8

12 • 24

31 • 68

This new and more powerful version takes over from the best winning 7 hp twin and will surely continue its success.



SP 155 TC

50' - 70'

155 • 341

250 • 9,8"

Counter rotating

• 8 • 10,7

24 (12 V Kit available)

44 • 97

With counter rotating four bladed propellers, mechanically built like its larger brothers, this thruster is the most powerful and reliable in its size.



SP 220 TC

60' - 84'

220 • 484

300 • 11,8"

Counter rotating

11,2 • 15

24 (12 V Kit available)

70 • 154

This is probably the most powerful 24V thruster on the market. The favourite thruster among leading boat builders for their 65' to 80' yachts.



SP 285 TC

74' - 100'

285 • 627

300 • 11,8"

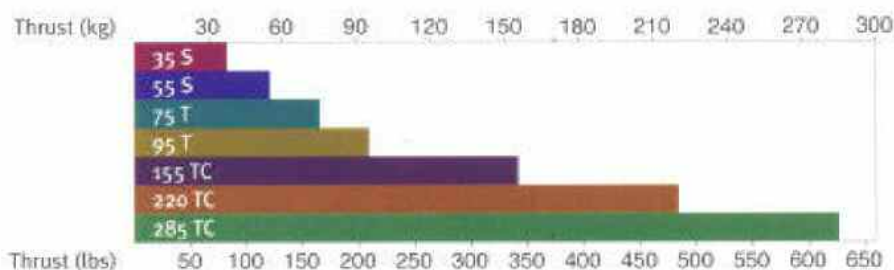
Counter rotating

15 • 20

48 (24 V Kit included)

73 • 160

We invented the 24V • 48V concept. The SP 285 TC is the most powerful DC thruster available.



Choose a **hydraulic thruster** if you need it for more than close quarter manoeuvring

For fishing boats, small ferries and some larger yachts.

Hydraulic thrusters offer two advantages compared to electric thrusters. In conjunction with a good hydraulic system these thrusters offer continuous use.

This is often necessary for boats such as fishing trawlers, small ferries and some larger yachts where thrusters are used for more than close quarter manoeuvres.

The other advantage of hydraulic thrusters is the ability to control speed by means of a proportional control valve.

With models from 100 kg to 300 kg of thrust for use as either bow or stern thrusters, Sidepower probably has a model for your boat.

* most hydraulic thrusters are rated at their necessary hydraulic power supply



SP 100 HYD



SP 220 HYD



SP 300 HYD

Model	SP 100 HYD	SP 220 HYD	SP 300 HYD
Light duty thrust (kg • lbs)	100 • 220	220 • 484	300 • 660
Heavy duty thrust (kg • lbs)	80 • 176	200 • 440	270 • 594
Tunnel diameter (mm • in)	185 • 7,3	250 • 9,8	300 • 11,8
Propulsion system	Twin	Counter rotating	Counter rotating
Hydraulic power* (kw • Hp)	8,1 • 10,9	18,7 • 25,1	23 • 30,8
Propeller output (kw • Hp)	6,5 • 8,7	15 • 20,1	18,4 • 24,7
Hydraulic motors (cm ³)	6 • 8,5 • 11	14,5 • 19,5	19,5

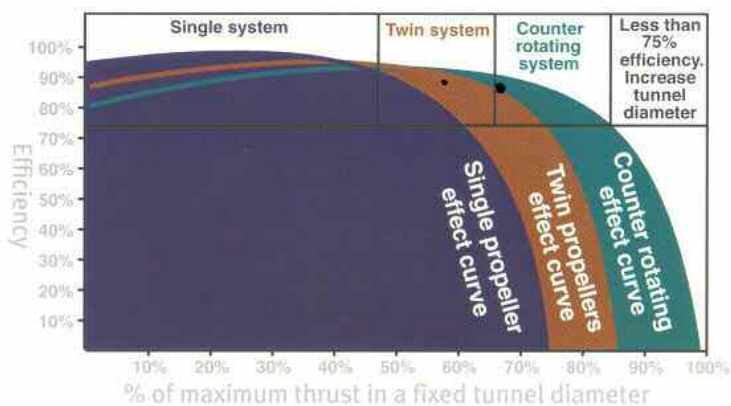
Contact your local Sidepower dealer for help on selecting the right thruster for your demands

Thruster Facts

Using the right propulsion system for each thruster

There are three propulsion systems that can be used for thrusters, each one having its own advantages. When used at the right level of thrust per tunnel diameter, each system provides a good performance ratio. All three systems are used in the Sidepower range of thrusters, and through extensive testing, both in-house and at professional marine laboratories each Sidepower offers you the best possible combination of performance, reliability and price.

Performance comparison of different propulsion systems in the same tunnel diameter



S (Single) A properly engineered single propeller system will be the most energy efficient thruster. Its compact design fits easily into narrow bows making it the perfect choice for our smaller models.



T (Twin) The twin propeller system can give more thrust than a single propeller system in the same tunnel diameter. This is our choice for our mid-range models where high thrust is required in a small tunnel diameter.



TC (Twin Counter Rotating) Twin Counter Rotating propellers can give the most thrust at a good performance ratio in a limited tunnel diameter. This system is used in our larger thrusters for maximum power.



1 Electric Motor

Our electric motors are specially designed and built for Sidepower. They are made to achieve maximum performance in real-life conditions, still keeping weight, size and power consumption to a minimum. All Sidepower electric thrusters can be run for at least 3 minutes continuously, and have a built in overheat protection. A new and important feature is the battery cable connection poles on the sides of the motor, which makes it faster and easier to install the thruster.

2 Solenoids

The solenoids are mounted directly on the motor, behind a strong cover. They are designed to prevent a voltage drop that could reduce performance. All electrical components come completely set up. You just have to connect the thruster to the battery. Sidepower thrusters come as standard with an electronic control box, protecting the unit against failure due to sudden change of drive direction.

FAQ's on Thrusters

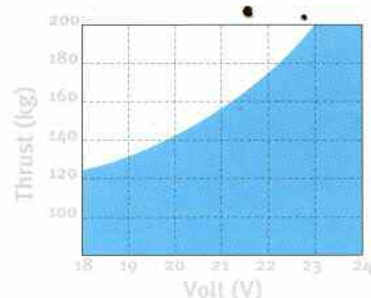
Q: Can I install a thruster when I have very limited space in the bow of my boat ?

A: Yes, a thruster can be installed in most boats by adopting the tunnel installation to the shape of the hull. You can also install the thruster in a horizontal position so that it goes under the floor if necessary. The Sidepower installation manual will show you how to do this for almost any type of boat.

Q: What advantages has a tunnel thruster compared to a retractable thruster ?

A: A tunnel thruster is always more reliable as it has a lot less complicated mechanics and it is also a lot more cost effective. With the right tunnel installation, it has very few disadvantages compared to a retractable thruster.

The electric installation is important



Q: Will a tunnel installation slow down my boat ?

A: Yes. However with a good tunnel installation, any loss of performance will not be noticeable in most boats.

Q: Does a thruster need servicing ?

A: A Sidepower thruster needs a minimum of servicing. Change the zinc anode annually, or when necessary and check the oil tank, that's it.

Q: Will the bow be weakened by installing a tunnel ?

A: No, not at all. The bow will actually be considerably stronger and stiffer by installing a tunnel.

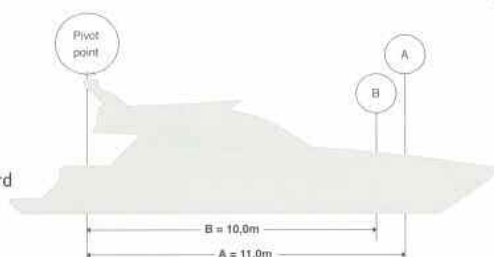
The tunnel position is important

Example with an SP 95 T thruster (95kg thrust)

In position B the effect on the boat is $95\text{kg} \times 10\text{m} = 950\text{kgm}$

In position A the effect on the boat is $95\text{kg} \times 11\text{m} = 1045\text{kgm}$

By moving the tunnel 10% forward you get 10% better performance



Q: Why can an electric thruster only run continuously for a limited time ?

A: Depending on its efficiency, all electric motors will transform part of their energy consumption into heat. That is why the Sidepower motors are custom built for high energy efficiency and can be operated continuously for 3 minutes or more. With the correct size of thruster an average usage time would be 10 to 20 seconds to perform most manoeuvres.

Q: What will influence the thrusters' actual performance ?

A: The tunnel position in the boat is important. The further forward you install the tunnel, the more leverage you get (see illustration below).

The tunnel integration with the hull is also important to ensure the best possible waterflow for the thruster and to avoid turbulence and cavitation.

As the actual effect of an electric motor is totally dependant on the voltage it gets while running, it is very important to use high power batteries and good cable sizes. The bigger the better (see graph below).

3 Motor Bracket

The motor bracket fastens the motor and the underwater gear house to the tunnel. We have made this a strong, yet lightweight construction.

4 Gear House

The gear house is made of seawater-resistant bronze. Its slim and hydrodynamic design keeps water resistance and turbulence to a minimum. The stainless steel propeller shaft, high quality gears, seals, and bearings ensures many years of trouble-free operation. The drive gear is protected by a shear-pin or a flexible coupling on all models.

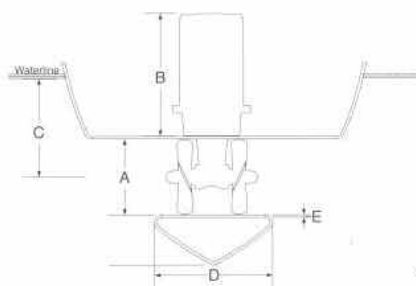
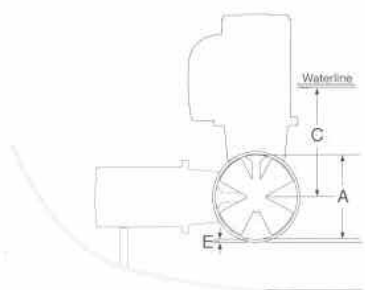
5 Propeller

We use only 4 bladed propellers for optimum performance and minimal noise. Lightweight and strong, these propellers provide equal thrust in both directions.

6 Zinc Anodes

To protect the metal parts that are exposed to water against electrolysis and corrosion, we have installed replaceable zinc anodes. Fastened by just one screw these zinc anodes are easy to access and replace from the outside without removing other parts.

Specifications



Measurements	SP 35 S	SP 55 S	SP 75 T	SP 95 T	SP 155 TC	SP 220 TC	SP 300 TC
A (mm · in)	125 · 4,92	185 · 7,28	185 · 7,28	185 · 7,28	250 · 9,84	300 · 11,81	300 · 11,81
B (mm · in)	216 · 8,5	255 · 10,0	350 · 13,78	396 · 15,60	423 · 16,65	445 · 17,52	445 · 17,52
C min. (mm · in)	125 · 4,92	150 · 5,91	200 · 7,87	200 · 7,87	250 · 9,84	300 · 11,81	300 · 11,81
D (mm · in)	92 · 3,6	117 · 4,6	170 · 6,7	170 · 6,7	300 · 11,81	300 · 11,81	300 · 11,81
E min. (mm · in)	4 · 0,16	4 · 0,16	6 · 0,24	6 · 0,24	7 · 0,28	10 · 0,39	10 · 0,39
E max. (mm · in)	5 · 0,20	6 · 0,24	8 · 0,31	8 · 0,31	10 · 0,39	13 · 0,51	13 · 0,51

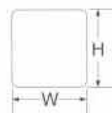
Technical details

Thrust (kg · lbs)	35 · 77	55 · 121	75 · 165	95 · 209	155 · 341	220 · 484	285 · 627
Propulsion	Single	Single	Twin	Twin	Counter rotating	Counter rotating	Counter rotating
Power (kw · Hp)	2,2 · 3	3,1 · 4	4,4 · 6	6 · 8	8 · 10,7	11,2 · 15	15 · 20
Weight (kg · lbs)	10 · 22	16 · 35	20 · 44	31 · 68	44 · 97	70 · 154	73 · 160
Voltage (V)	12	12 · 24	12 · 24	12 · 24	24	24	48
Other install. voltage (V)					12 V extra	12 V extra	24 V standard
Min. Battery cap. (CCA)	300	350 · 175	500 · 250	700 · 350	500	700	2 x 450-24V

Item code 12V	SP35S	SP55S12	SP75T12	SP95T12			
Item code 24V		SP55S24	SP75T24	SP95T24	SP155TC	SP220TC	SP285TC

Control panels:	Touch panel	Joystick panel	Dual Joystick panel	Remote transmitter*	Receiver*
H (mm · in)	70 · 2,76	70 · 2,76	120 · 4,72	95 · 3,74	120 · 4,72
W (mm · in)	70 · 2,76	70 · 2,76	70 · 2,76	45 · 1,77	80 · 3,15
Item code (12 & 24V)	8800	8900	8902		
Radio remote* (bow + stern thruster)				8907	8908

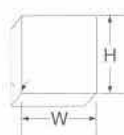
* Due to FCC regulations radio remote is not available in US yet.



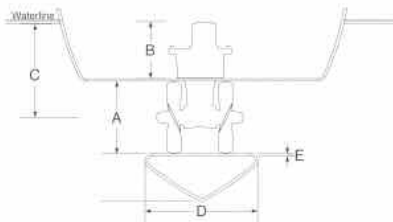
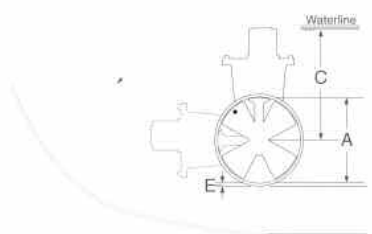
Voltage conversion boxes

Using the principle of series/parallel battery connections these boxes lets you install 24V thrusters in 12V boats (necessary extra battery is not included)

	For SP155TC	For SP220TC
H (mm · in)	285 · 11,2	285 · 11,2
W (mm · in)	265 · 10,4	265 · 10,4
D (mm · in)	110 · 4,33	110 · 4,33
Item code	10112A	15112A

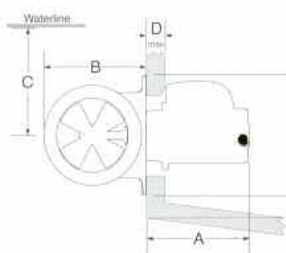


CE All Sidepower products fulfil the requirements of the relevant CE-directives.



Measurements	SP 100 HYD	SP 220 HYD	SP 300 HYD
A (mm · in)	185 · 7,28	250 · 9,84	300 · 11,8
B (mm · in)	215 · 8,50	235 · 9,30	245 · 9,60
C min. (mm · in)	200 · 7,87	250 · 9,84	300 · 11,8
D (mm · in)	170 · 6,70	300 · 11,8	300 · 11,8
E min. (mm · in)	6 · 0,24	7 · 0,28	10 · 0,39
E max. (mm · in)	8 · 0,31	10 · 0,39	13 · 0,51

Technical details	SP 100 HYD	SP 220 HYD	SP 300 HYD
Light duty thrust (kg · lbs)	100 · 220	220 · 484	300 · 660
Heavy duty thrust (kg · lbs)	80 · 176	200 · 440	270 · 594
Propulsion	Twin	Counter rotating	Counter rotating
Hydraulic power (kw · Hp)	8,1 · 10,9	18,7 · 25,1	23 · 30,8
Propeller output (kw · Hp)	6,5 · 8,7	15 · 20,1	18,4 · 24,7
Hydraulic motors (cm ³)	6 · 8,5 · 11	14,5 · 19,5	19,5
Flow rating up to (l/min.)	26 · 37 · 48	50 · 67	57
Pressure drop up to (bar)	186 · 131 · 101	224 · 167	242



Stern Thrusters	SP 55 S	SP 75 T	SP 95 T	SP 155 TC	SP 220 TC	SP 285 TC
A (mm · in)	125 · 8,46	299 · 11,80	356 · 14,00	383 · 15,08	395 · 15,55	395 · 15,55
B (mm · in)	256 · 10,08	256 · 10,08	256 · 10,08	340 · 13,39	420 · 16,54	420 · 16,54
C min. (mm · in)	150 · 5,91	200 · 7,87	200 · 7,87	250 · 9,84	300 · 11,81	300 · 11,81
D (mm · in) max.	35 · 1,38	54 · 2,13	54 · 2,13	54 · 2,13	60 · 2,36	60 · 2,36
Tunnel length (mm-in)	337 · 13,27	337 · 13,27	337 · 13,27	350 · 13,78	456 · 17,95	456 · 17,95
Item code	90050	90085	90085	90140	90250	90250

INSTALLATION PARTS

GRP Tunnels are available in several lengths for each thruster model. You can also get aluminium and steel tunnels from Sidepower. Please consult pricelist for details on available lengths for the different tunnel diameters.

Other original installation equipment includes many lengths of control cables, a selection of fuses and main battery disconnectors. Please consult pricelist for details.

Tunnels



Serial-Parallel switching



Revolutionary Sidepower automatic main switch / fuse combination



- automatic main power controlled on/off by the thruster panel
 - maximum convenience and safety (included cover not shown)
- Please see separate leaflet for details.

NEW!



SIDE-POWER

Bow and Stern Thrusters

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